

REMARKS/ARGUMENTS

These remarks are submitted in response to the final Office Action of August 10, 2007 (Office Action). As this response is timely filed within the 3-month shortened statutory period, no fee is believed due. However, the Examiner is expressly authorized to charge any deficiencies in payment to Deposit Account 50-0951.

New Grounds Of Rejection

On the basis of new grounds of rejection, noted at page 2 of the Office Action, each of the claims was rejected. Claims 1-5, 7-9, 11, 13-20, 22-30, and 32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Published Patent Application 2002/0047550 to Tanada (hereinafter Tanada) in view of U.S. Patent 5,331,434 to Kikinis (hereinafter Kikinis). Claims 10, 21, and 31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanda and Kikinis in view of U.S. Patent 6,121,949 to Ramamurthy (hereinafter Ramamurthy). Claim 12 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanada and Kikinis, in view of U.S. Patent 6,836,260 to Cok (hereinafter Cok). Additionally, an objection to Claim 32 was made at page 2 of the Office Action.

Although Applicants respectfully disagree with the rejections, Applicants nevertheless have amended certain claims and cancelled certain other claims so as to expedite prosecution of the present application by emphasizing certain aspects of the invention. Applicants respectfully note, however, that neither the amendments nor cancellation of claims are intended as, and should not be interpreted as, the surrender of any subject matter. Accordingly, Applicants respectfully reserve the right to present the original version of any of the amended claims in any future divisional or continuation applications from the present application.

In particular, Applicants have amended independent Claims 1, 13, 15, 23, and 25 to further emphasize certain aspects of the invention. Applicants also have amended dependent Claims 2, 3, 4, 5, 9, 10, 11, 14, 16, 17, 18, 21, 24, 26, 27, 28, 31, and 32 so as to maintain consistency among the claims. The amendments to Claim 32 also address the noted claim objection. Applicants have cancelled dependent Claims 7, 8, 19, and 29. The claim amendments, as discussed herein, are fully supported throughout the Specification. No new matter has been introduced by virtue of any of the claim amendments.

Certain Aspects Of Applicants' Invention

At this juncture, it may be useful to reiterate certain aspects of Applicants' invention. One embodiment of the invention, typified by Claim 1, is a self-calibrating imaging display system. The system can include a display having a screen, and a multiple photosensors integrated with the screen. The photosensors can be configured to detect luminance values correlating to distinct luminance levels at different regions of the screen. (See, e.g., Specification, paragraph [0022].)

Additionally, the system can include a calibration module. The calibration module can be configured to receive from the photosensors inputs correlating to the luminance values. The calibration module, moreover, can be configured to determine a plurality of luminance correction factors, different ones of the luminance correction factors being applied to different regions of the screen so as to adjust luminance of the screen at the different regions. (See, e.g., Specification, paragraph [0022].)

The Claims Define Over

As already noted, independent Claims 1, 13, 15, 23, and 25 were rejected as being unpatentable over Tanada in view of Kikinis. Tanada is directed to a "self light emitting device" that is intended to maintain a uniform screen display without "brightness

irregularities." (Tanada, paragraph [0027]; see also Abstract, lines 1-4.) With Tanada, a "degradation state" is detected independently of electroluminescence degradation. (See Tanada, paragraph [0027], 3-6.) In general, Tanada describes a self light emitting device that can detect brightness on a pixel-level basis and apply corrections to ensure a uniform display image.

Applicants respectfully submit, however, that Tanada, taken alone or in combination with Kikinis, yet fails to teach or suggest every feature recited in Claims 1, 13, 15, 23, and 25. More fundamentally, Applicants respectfully submit that Tanada, regardless of any teaching regarding the detection of brightness, does not disclose those features that enable the detection, and adjustment, of inter-regional contrasts. This aspect is often critical, for example, in some radiology modalities like mammography and in some cases digital colonoscopy so as to ensure that a display can repeatedly meet a designed calibration specification. Moreover, in contrast to Applicants' invention, Tanada is limited to self light emitting devices.

One of the features of Applicants' invention not taught or suggested by the combination of Tanada and Kikinis is that of a calibration module which receives from multiple photosensors inputs correlating to luminance values at different regions of a display screen, as recited in each of the independent claims. Moreover, the combination fails to teach or suggest a calibration module that determines different luminance correction factors that are applied to different regions of the screen so as to adjust luminance of the screen at the different regions, as further recited in the independent claims.

A portion of Tanada cited at page 6 of the Office Action describes computing "brightness differences" for several "grey scales:"

"A difference in brightness therefore arises between the detected brightness and the standard brightness even if the same gray scale signal is displayed.

The brightness difference is computed for several gray scales of the digital image signal currently used, correction is added to a first image signal 101A for the computed gray scales in each pixel, and a second image signal 101B is obtained, and then input to the display device." (Tanada, paragraph [0107], lines 16-23.)

As used by Tanada, the term grayscale has its conventional meaning, namely, that of a display image that is composed of shades of gray that vary from black at the weakest intensity to white at the strongest. Tanada discloses computing a brightness difference for several grayscales. But a grayscale is not a distinct region of a display, and Tanada does not contemplate dealing differently with distinct regions of a display. It follows that, regardless of Tanada's computing a difference for several grayscales, Tanada discloses nothing pertaining to different luminance correction factors that are applied to different regions of the screen, as expressly recited in Claims 1, 13, 15, 23, and 25.

Kikinis, cited in relation to other features in the claims, similarly fails to teach or suggest these features. Accordingly, the combination of Tanada and Kikinis fails to teach or suggest every feature recited in Claims 1, 13, 15, 23, and 25.

Applicants respectfully submit, therefore, that Claims in Claims 1, 13, 15, 23, and 25 each define over the prior art. Applicants further respectfully submit that, whereas each of the remaining claims depends from Claim in Claims 1, 13, 15, 23, or 25 while reciting additional features, each of the dependent claims likewise defines over the prior art.

CONCLUSION

Applicants believe that this application is now in full condition for allowance, which action is respectfully requested. Applicants request that the Examiner call the undersigned if clarification is needed on any matter within this Amendment, or if the

Appln. No. 10/677,970
Amendment dated October 10, 2007
Reply to Office Action of August 10, 2007
Docket No. BOC9-2003-0027 (396)

Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

Date: October 10, 2007

A handwritten signature in dark ink, appearing to read "Gregory A. Nelson", written over a horizontal line.

Gregory A. Nelson, Registration No. 30,577

Richard A. Hinson, Registration No. 47,652

AKERMAN SENTERFITT

Customer No. 40987

Post Office Box 3188

West Palm Beach, FL 33402-3188

Telephone: (561) 653-5000